Improving Care Coordination through Systems of Care Development

Calvert County Health Department

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Introduction

Calvert County is the smallest county in the state of Maryland, accounting for only 2.2% of the total land mass of the state. However, it is one of the fastest growing counties in Maryland as the population has increased three times the state average over the last 20 years to close to 90,000 people. While the county has rapidly grown, it has maintained its rural character. It enjoys one of the highest standards of living and is less than 55 miles from both Washington, D.C. and Baltimore, Maryland (Calvert County Department of Economic Development, 2006).

Calvert County is located in the southern region of the state. Essentially a peninsula, the county is bordered on the east by the Chesapeake Bay and on the west by the Patuxent River. With a long and thin topography, the county's "spine" is Maryland Routes 2/4 running from Dunkirk in the north to Solomons Island in the south. This topography presents challenges to both transportation and service delivery that are unique to Calvert County. Traditionally, Calvert County has, along with Charles and St. Mary's Counties, been referred to as "Southern Maryland." In addition, Calvert borders Prince George's County, on the west, and Anne Arundel County to the north. Anne Arundel and Prince George's Counties provide jobs and throughways for employment within the greater metropolitan Washington, D.C. and Baltimore areas for Calvert County commuters (Calvert County Department of Economic Development, 2006). These unique characteristics of the county and its population affect the analysis of the county's public health needs.

Table 1 shows an overview of the population of Calvert County and the State of Maryland. The rate of increase in the population for Calvert County is overall three

times (19.1% v. 6.0%) the population increase for the State at large. This continued rapid growth puts increased stress on the demands for all public services (Mental Health Plan, 2009-2010).

Comparison of Population of Calvert County and State of Maryland for 2006

	Calvert County	
Population 2006 estimate	88,804	5,615,727
Population 2000	74,563	5,296,486
Increase	19.1%	6.0%
Persons under 5	6.1%	State of Maryland
Persons under 18 years old	26.1%	25.1%
Persons 65 years or older	9.1%	11.5%

Source: (Calvert County Department of Economic Development, 2006)

Table 1.

With the growth and development of Calvert County the public health service system is constantly evaluating how to meet the demands of the communities. Calvert County Family Network (CCFN; 2006) reported that:

> Youth and young adults are often an overlooked population without a voice. It is expected that approximately 20% of any jurisdiction's population under the age of 18 years will require some form of targeted intervention. Given Calvert County's population estimate is 88,000 of which 26.5% are under age 18, approximately 4,664 or 20% of these children and their families may need either targeted intervention or more intensive intervention services. The 80% of families that do not need a more targeted level of services can still benefit from prevention and universal health promotion related activities.

The Mid-Atlantic Health Leadership Institute (MHLI) team has developed one possible strategy to meet the public health needs for youth and young adults. The team has proposed that coordination of care and the adoption of a system of care philosophy can improve public health.

The public health challenges associated with our project include a prevalence of substance abuse, mental health issues, and sexually transmitted diseases (STDs) among

the 13-21 year old population. Two issues of concern are the coordination of services for this age group and the limited services that are available to the youth and young adults. Stakeholders for this age group include families, support partners, the health department, county policy makers, law enforcement, juvenile services/probation, educational systems, social services, the local management board, and regional service providers. Our vision for this project is that all youth and young adult service agencies utilize a uniform intake process and apply system of care principles utilizing the wraparound process as one aspect of development. Wraparound is an approach to implementing individualized, comprehensive services within a system of care for youth with complicated multi-dimensional problems. One population for whom wraparound has proven particularly useful is those children and adolescents with severe emotional and behavioral problems (Substance Abuse and Mental Health Services Administration [SAMHSA], 1998). This approach will provide comprehensive services to youth and young adults for human services within Calvert County. The project goals are to decrease substance abuse, STDs and unintended pregnancies, and to promote recovery of mental health related issues in the target population.

The approach will take place in three phases. Phase I will consist of increasing coordination of services between Substance Abuse, Mental Health, and Reproductive Health within the Calvert County Health Department. Phase II will involve implementation of the systems of care philosophy within all divisions of the health department and Phase III will involve local agencies participation (e.g., Department of Social Services, Department of Juvenile Services, Tri-County Youth Services). This project will focus on Phase I and II.

Objectives:

By June 30, 2009, all county agencies will receive training on the Network of Care (online resource database).

By July 1, 2009, approval will be sought from the health department to develop a system of care philosophy.

By December 1, 2009, a unified intake process will be developed and utilized by the health department.

By December 1, 2009, all health department staff will receive training on the system of care.

By July 1, 2010, grant funding will be obtained to support Calvert County as a system of care community.

By January 1, 2011, Calvert County will be a system of care community.

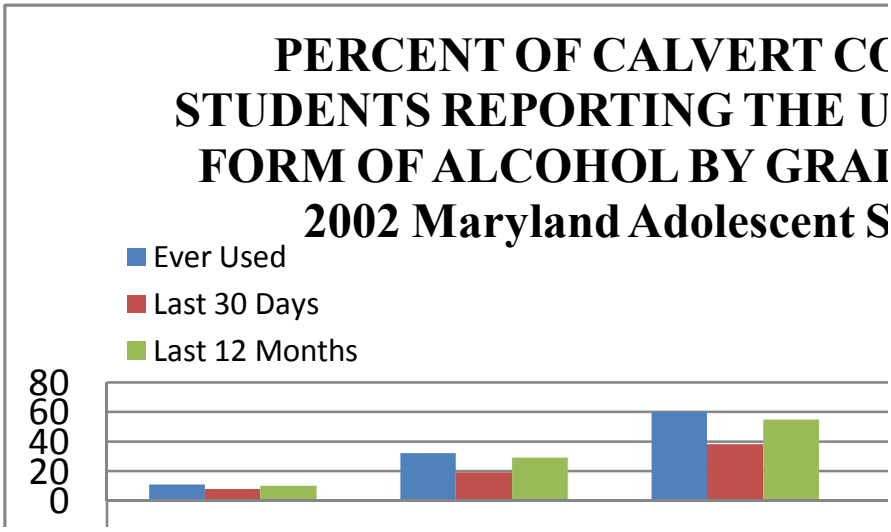
Background

Substance Abuse

Alcohol

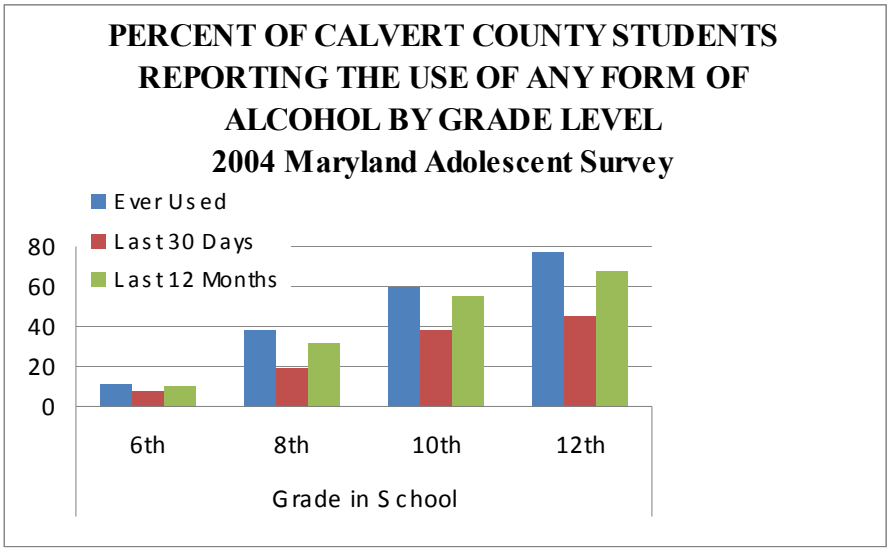
According to the 2004 Maryland Adolescent Survey (MAS) published by the Maryland State Department of Education (MSDE) and National Institute on Drug Abuse (NIDA, 2007), alcohol is the most widely used substance by Maryland and national teens alike. Results of the 2007 Monitoring the Future (MTF) survey (NIDA, 2007) indicate that 72% of 12th graders reported ever using alcohol with nearly half (44%) using alcohol in the past 30 days (NIDA, 2007). The 2004 MAS indicates that alcohol usage for Maryland teens is just slightly lower than national rates. However, according to the MAS, Calvert teenagers report more alcohol use than youth in the state. In both 2002 and 2004, Calvert's 8th, 10th, and 12th graders reported more drinking across these three categories of measurement: "ever used," "used in the last 30 days," or "used in the last 12 months." Calvert's 6th graders do not show as much use as their counterparts across the state.

Consistent with national trends, as teenagers get older they drink more. In Calvert County, in 2002 and 2004, those reporting "ever using" alcohol almost doubles between 8th and 10th grade and more than doubles between 8th and 12th grade. The same pattern holds true for drinking in the past 30 days and within the past 12 months. This trend is clearly seen in Graphs 1 and 2 below. Most alarming is the percentage of Calvert County teenagers who reported drinking in the past 30 days. Over 50% of 12th graders in 2002 reported use in the past 30 days and 46.5% reported the same in 2004. Although a drop is denoted between 2002 and 2004, the same cohort of 12th graders report ever using alcohol at 75.2% and 67.6% report drinking within the year—up from 2002 figures. This evidence indicates that alcohol use among Calvert teenagers is not on the decline.



Source: (MAS, 2004)

Graph 1.

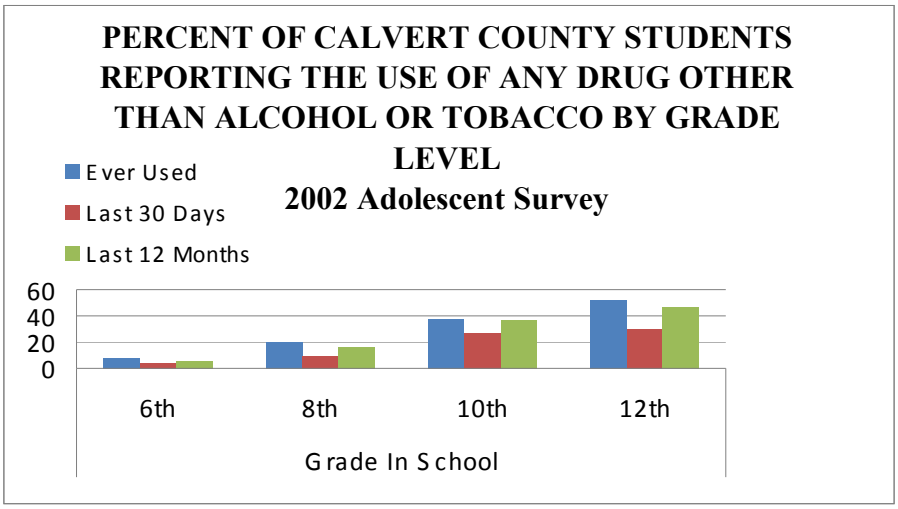


Source: (MAS, 2004)

Graph 2.

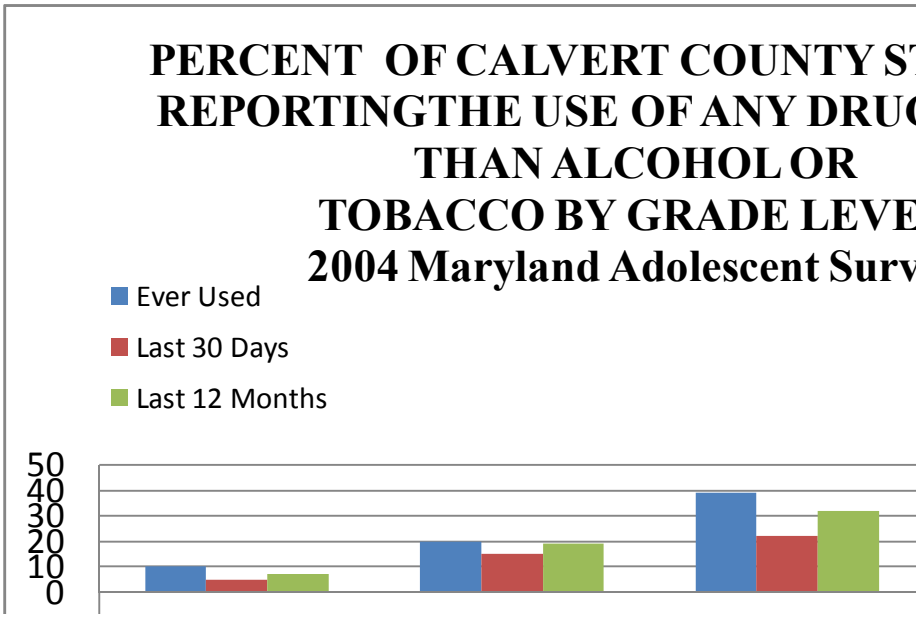
Illicit Drugs

While alcohol continues to be used by Calvert adolescents, especially in 12th graders, some progress has been made in decreasing use of drugs other than alcohol or tobacco. Between 2002 and 2004 (as illustrated in Graphs 3 and 4 below), 12th graders reported less use across all three categories of measurement. However, while the prevalence of illicit drug use has not significantly increased, 6th graders are reporting more use across all three categories and especially "ever used." Moreover, in both 2002 and 2004, Calvert's 6th graders reported ever using an illicit drug at higher percentages than do their counterparts across the state.



Source: (MAS, 2004)

Graph 3.



Source: (MAS, 2004)

Graph 4.

Marijuana

Marijuana is the second most commonly used substance by Maryland and national teens alike (MAS, 2004; NIDA, 2007). According to the 2007 MTF survey 42%

of 12th graders reported ever using marijuana (NIDA, 2007) with past 30 day use reported at 19% (NIDA, 2007). Results of the 2004 MAS indicate that 43% percent of 12th graders report they had tried marijuana and almost a quarter (22%) report they had used marijuana in the past 30 days. Nearly one-third (28%) of 10th graders reported they had tried marijuana with 18% using in the past 30 days. Calvert County's 12th graders marijuana usage rate for the past 30 days was lower than Maryland's rate, but higher than the national rate. Calvert County's 10th graders usage was reported as slightly higher than the national rate and the Maryland rate. See Table 2 for more information.

Calvert/Maryland/National Marijuana Use by Grade: Usage in the Last 30 days

	Calvert	Maryland	National
8th Grade	7%	6%	6%
10th Grade	18%	16%	14%
12th Grade	21%	22%	19%

Source: (MAS, 2004; NIDA, 2007)

Table 2.

Heroin

Results of the 2007 MTF survey indicate that 2% of teens reported ever using heroin (NIDA, 2007). On a national level, heroin use is low among teens; however, the usage in Calvert County and Maryland is higher than national rates (MAS, 2004; NIDA, 2007). Of particular concern for Calvert County is the data for usage rates in the past 30 days for 8th graders, which reflect twice the state rate and four times the national rate.

Prescription and Over the Counter Medications

Today's teenagers are more likely to have abused medications than a variety of illegal drugs like ecstasy, cocaine, crack, and methamphetamine (Partnership for a Drug-Free America, 2005). Nearly one in five teenagers (19 percent or 4.5 million) reported

abusing prescription medications to get high (Partnership for a Drug-Free America, 2005). One in three teenagers reported being offered a prescription or over the counter medicine for the purpose of getting high (Partnership for a Drug-Free America, 2005). National data indicates teenagers are using opiate prescriptions with 5% of 12th graders ever using OxyContin with 10% ever using Vicodin (NIDA, 2007).

Substance Use and Arrest Rates

Calvert County, juvenile crime, in general, has decreased. Between 1999 and 2003 total crime arrests fell from 888 to 813. However, drug abuse violations, liquor law violations and driving under the influence have increased. These arrests totaled 187 cases in 2003 and accounted for 22.7% of total arrests. Alcohol and drug crimes account for the highest proportion arrests of persons less than 18 years of age. Drug-related arrests were mostly for possession of marijuana. This trend has held steady over the five-year period between 1999 and 2003. However, there has been a slight increase in drugs sales/manufacturing arrests, again, related mostly to marijuana. See Table 3 for more information.

Juvenile Arrests by Type of Violation, and Year, Calvert County

	1999	2000	2001	2002	2003
Total Arrests	888	890	864	819	813
Drug-Related Arrests	124	116	121	122	129
Possession-Related Arrests	114	107	113	116	115
Sales/Manufacturing-Related Arrests	10	9	8	6	14

Source: Adapted by Center for Substance Abuse Research (CESAR) from data from the Uniform Crime Reporting (UCR) Program, Central Records Division, Maryland State Police (MSP).

Table 3.

Substance Use and Vehicle Accidents

According to the Maryland State Highway Administration (SHA, 2006), fatal alcohol and drug related vehicle crashes have declined among drivers aged 16-20 in Calvert County. Between 2002-2004, there was 1 fatal vehicle accident related to alcohol and drugs per year compared to none in 2005. In 2003, there were 30 alcohol and drug related accidents compared to 23 in 2005. The percentages of alcohol and drug related accidents declined slightly from 8% to 6% between 2001 and 2005.

Substance Abuse Treatment

Related to alcohol and drug arrests and vehicle accidents among youth are the incidence of treatment for substance abuse. According to *Outcomes and Outlooks 2003* (Alcohol & Drug Abuse Administration), 89% of all substance abuse treatment admissions, in 2003 among Calvert adolescents, reported a marijuana related arrest prior to treatment. Sixty-seven percent reported their primary drug of abuse as alcohol. Over half (54%) of all juveniles admitted to treatment were diagnosed with either abuse or dependence to both alcohol and marijuana. Just less than one half (45%) of all juveniles treated in 2003 were referred by the Department of Juvenile Services. Developing coordinated services within the county will allow for earlier identification and access to treatment services.

More recent ADAA data indicates similar trends. A large majority of Calvert County teens and young adults who were enrolled in substance abuse treatment had at least 1 arrest in the past 30 days. In fiscal year (FY) 07, more than twice the number of teens under age 18 entered treatment with a prior arrest than those with no arrests (116 vs. 46). In FY 07, those who were aged 18-20 entered treatment with an arrest at a rate of

7 times those without an arrest (142 vs. 21). In FY 08, teens and young adults both entered treatment with an arrest at a rate of 5-6 times those without an arrest. Improved utilization of referral, access, and monitoring processes will help reduce recidivism. This can all be accomplished through system of care development and the wraparound process.

Reproductive Health

CCFN in partnership with a subcommittee of the Calvert Coalition on Adolescent Pregnancy Prevention conducted a needs assessment in 2005 targeting Calvert's adolescent population. The needs assessment attempted to determine how Calvert adolescents were spending their time and to what extent youth were involved in high-risk behaviors. A review of the document "Trends and Issues in Adolescent Risk Behavior: An Asset Development Approach," shows that, in general, Calvert teenagers possess a healthy and constructive image of themselves, but they also engage in high-risk behaviors. Outcomes as a result of these behaviors include teen pregnancy, contraction of STDs, substance abuse, and involvement in violent or delinquent behavior. These are some of the challenges that adolescents and their parents face today.

According to the CCFN (2005) report, over the past 20 years, trend analyses showed that there has been an overall decline in the teenage pregnancy rate nationally, in Maryland, and in Calvert County. However, in the four years from 2001 to 2005, a few key demographic signs suggest that teenage pregnancy may be on the rise in Calvert County. For instance, Calvert County has experienced an overall population growth of 14% and an adolescent population growth of 18%. More telling, however, is the 8% increase in births to adolescents between the ages of 10-19 and 17% increase in births to adolescents between the ages of 15-17 years old over the past four years. While the

numbers are not high, the implications for teenage pregnancy and birth are significant. It is widely known that teen parents are more likely to drop out of high school, remain in poverty-like conditions, and be more susceptible to other high-risk behaviors such as substance abuse. This is evidence of the need for an improved system that coordinates youth and young adult services.

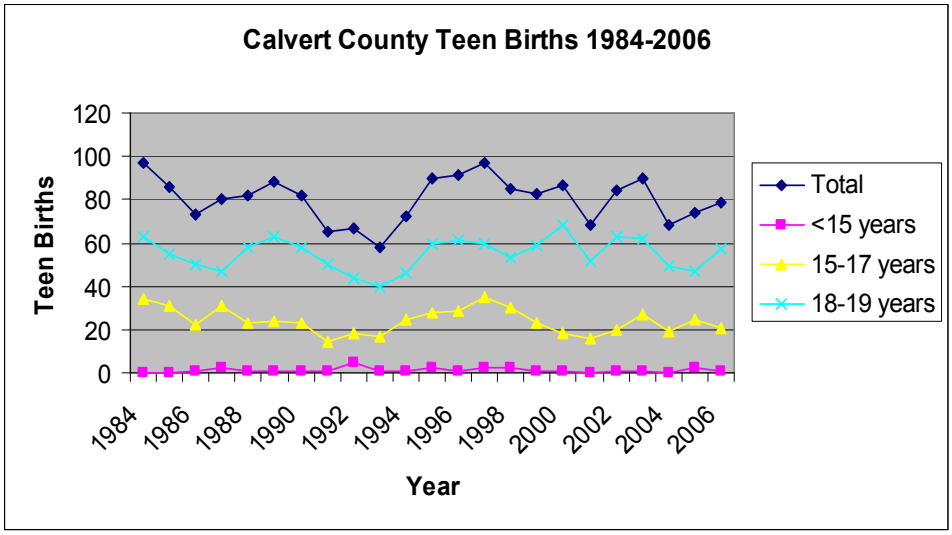
Of concern, as well, is the over representation of children born to minority teenage parents. An estimated 13% of Calvert County residents are African American and yet 32% of adolescents giving birth in Calvert County between 1999 and 2003 were African American. These statistics demonstrate a gap in outreach and delivery of services for this population. One of the primary core values of system of care is culturally competent service delivery. Cultural competency will be a primary focus of training provided to staff.

Although teen pregnancy may affect only a small proportion of the total adolescent population, sexual activity is noted by at least 50% of all teenagers (14-17) surveyed for the CCFN (2005) needs assessment. There is growing evidence that teenagers are initiating sexual intercourse at early ages. The average age of first sexual intercourse among those adolescents who report engaging in intercourse is 14.4 years. The CCFN (2005) needs assessment study shows that 25% of those adolescents who are having sexual intercourse do not take precautions to protect themselves from pregnancy or sexually transmitted infections. According to the CCFN (2005) needs assessment:

> Specific to sexual behavior, there are three key areas that differentiate sexually active youth from abstinent youth. These include:
>
> 1) Sexually active youth report higher levels of other risky behaviors such as drug and alcohol use;
> 2) Sexually active youth place a lower value on the importance of sexual abstinence; and

3) Sexually active youth are more likely to buy into myths regarding sexual behavior, such as believing that a high number of youth have had sex, believing in the importance that peers place on sex, and believing that youth use drugs and alcohol as a prelude to sex.

Calvert County continues to face an increasing number of pregnancies as well as sexually transmitted infections among young people under the age of 17 years. Our teen birth rate has increased from 1.9 to 2.7 for that age group. Graph 5 demonstrates the increase in teen birth rates in Calvert County. Of greatest concern is the increasing number of 15-17 year olds with Gonorrhea and Chlamydia. Data collected through a CCFN (2005) needs assessment clearly shows gaps in services for outreach and education among young people in our county. Specifically, the time period after students are released from school is critical in preventing risky behaviors. Research shows that the likelihood of the first sexual experience increases with the number of hours teens spend unsupervised.



Graph 5.

There are greater than 1.25 million persons living with HIV and AIDS in the United States. Two people under the age of 25 get infected with HIV every hour, every day! Washington D.C. ranks 1st while Maryland ranks 3rd in AIDS incidence rate per capita (Center for Disease Control and Prevention [CDC], 2007; Maryland Aids Administration, 2007). According to the Maryland AIDS Administration (2007) Calvert County has 38 living HIV cases and 42 living AIDS cases reported through September, 2007. Cumulatively, there are 89 AIDS cases and 43 AIDS deaths in Calvert County reported through September, 2007.

Substance Abuse and Reproductive Health

Teens that drink or used drugs are more sexually active and less likely to use contraception when they have sex. (National Campaign to Prevent Teen Pregnancy, n.d.). Seventy-two percent of teens who have used drugs have had sex, compared to 36% who have had sex and have never used drugs (The National Center on Addiction and Substance Abuse, 1999). More than one-third of sexually active teens and young adults age 15 to 24 report that alcohol or drug use has influenced them to engage in sexual behavior (Youth Knowledge and Attitudes on Sexual Health: A National Survey of Adolescents and Young Adults, 2002).

Research has documented the association between substance use and STDs (CDC, 2001, January; Marx, Aral, Rolfs, Sterk, & Kahn, 1991). The National Survey on Drug Use and Health (NSDUH) found that the likelihood of having an STD in the past year was related to the frequency of alcohol or illicit drug use during the past month (SAMHSA, 2007). Having an STD in the past year was more common among persons aged 18-25 who used both alcohol and illicit drugs in the past month (34%) than those who used neither alcohol nor an illicit drug (1%). Similar patterns were found for both

males and females. This connection between reproductive health and substance abuse clearly shows the need for coordinated services.

According to the FY 08 Family Planning Annual Report (FPAR) for the Calvert County Health Department, a total of 1,428 patients were seen in the reproductive health clinic. Of those, 74% were under age 25. Twenty-one percent served were black females. There were seventy-four positive pregnancy tests confirmed, of which 73% were for 15-24 year olds and 18% of those were for 15-17 year olds. A total of 838 gonorrhea tests were performed, 384 syphilis tests, and 267 HIV tests during FY 08. Thirty-six percent of males served in the STD clinic were black males.

Teen pregnancy is linked with various types of violence, including partner violence and sexual abuse, and often leads to other risky behavior. It is also the case that teens that are pregnant are at increased risk of experiencing domestic violence. Approximately 50 to 60% of adolescents who become pregnant have a history of childhood sexual or physical abuse (Alan Guttmacher Institute, 1994). Childhood sexual abuse also seems to have a clear connection with emotional problems and substance use in adolescence. Victims of sexual abuse are more likely to suffer from mental health problems and to use substances as a coping mechanism (Saewyc, Leanne Magee, & Pettingell, 2004). Thus, program providers need to pay particular attention to the underlying causes of these mental health and substance abuse problems

Mental Health

The Calvert County Family Network (2006) indicated in their strategic plan for the county that 4,664 families are going to require, “intense intervention services.” Of that number, in FY 08 only 14 new cases were brought to the attention of the county local coordinating council for coordination of intense interventions. A conclusion that can be

drawn from these numbers is that children are not receiving the services they require. SAMHSA (1998) reported that half of the children who require treatment for mental health challenges do not get treatment. For example, the majority of adolescents placed in the Tri-County Child and Adolescent Crisis House are Calvert County residents and are placed by the Department of Juvenile Services. In FY-08, the occupancy rate was 80%, totaling only 27 admissions. One hundred and fifty-one children were unable to be admitted during the fiscal year due to the home being at capacity. Through a coordinated network of services with mental health, substance abuse and specialized health care providers children will be able to access and obtain necessary care and services.

SAMHSA (n.d.) reports that health and health-related problems associated with untreated mental health needs include: alcohol, tobacco, and/or substance abuse, psychosomatic symptoms, risky behaviors, slow recovery or poor health outcomes, and suicide. CDC (2008, Summer) reported that suicide is the third leading cause of death for youth ages 10-24. Between 2000 and 2004, Calvert County ranked second in the state of Maryland for crude suicide rates in youth ages 10-24 (Johns Hopkins University, correspondence, 2008). Suicide is largely related to major depression and other mental health conditions. With mental health issues killing our youth, more comprehensive and coordinated services are indicated.

Main Body

In order promote access to services and coordinated, appropriate community-based care for at-risk youth and young adults, the Calvert County MHLI team proposes a pilot project for the Calvert County Health Department. The team proposes that a system of care philosophy be implemented first within the Calvert County Health Department and second within the community. In order to begin the implementation process the team

has outlined three phases of development. Phase one of this proposal will be the focus for this team. Phase one involves coordination within three specific health department divisions (e.g. Substance Abuse, Reproductive Health, Mental Health), utilizing a single intake procedure, a virtual record, an online resource directory and team meetings. Phase two involves implementing the same system within other divisions of the health department. Phase three would be county-wide (e.g. Department of Social Services, Department of Juvenile Services and Board of Education) implementation of systems of care.

SAMHSA (n.d.) states that a system of care is a coordinated network of community-based services and supports that is organized to meet the challenges of children and youth with serious mental health needs and their families. A system of care helps children, youth, and families function better at home, in school, in the community, and throughout life. Some of the core values of the system of care are community-based, person centered, family focused, strength-based, and culturally competent services (Pires, 2002).

To begin our implementation of a system of care philosophy, we first created a survey to gather feedback from health department employees. The survey questions were created to determine importance of coordinating care, knowledge of health department services, training needed regarding health department services, employee responsibility for follow-up care, training for referrals to other health department divisions, and if additional personnel for care coordination would be helpful. For more details see Appendix A. Approximately 120 employees received the survey, of which 85 surveys were returned. The survey response rate was 71%. Ninety-seven percent of the employees felt the coordination of care was very important (71%) or important (26%).

Results indicate that over three-fourth of respondents have little or some knowledge about other health department services, it is evident that cross training between health department divisions is needed. Eighty-four percent of employees wanted training about other health department divisions. Employees indicated that the referral process to other divisions is another area of training need; 76% of those stated specific training on the referral process to other services is needed. Forty-one percent indicated high levels of responsibility for follow-up care for their consumers and 38% said they had some responsibility in follow-up care. Less than one fifth of respondents indicated little or no responsibility in follow-up care. The majority of those who felt responsibility for follow-up care were mental health, community health, and substance abuse employees. Based on this data, it is indicated that employees believe in a coordinated care philosophy. Sixty-five employees (76%) of the 85 felt a care coordinator would be helpful to have at the health department. Survey data was helpful in planning the implementation of the project.

The team felt the first step will be to synchronize substance abuse, reproductive health and mental health services and their corresponding intake processes. A unified intake process will be developed within a paperless record system so that all programs will have access to specific information pertaining to a consumer's usage of services; this will be done with consumer consent. Pac Trac is one medical record database that could be considered for this objective. Another option could be the interface of current program databases used in each division. All of the divisions in the health department gather similar demographic and background information. To resolve the redundancy of information gathering a uniform intake process is being proposed. A uniform intake

process will allow a consumer to enter at any division within the health department and receive services from all divisions that are requested by the consumer.

An online resource directory (Network of Care) became available for use during our planning of the project. This online resource directory satisfied a need that was indicated by the MHLI team. The NOC is accessible to all service providers, health department employees and citizens. In July of this year, training on utilization of the NOC was offered for all health department employees. Forty-six community and health department employees attended the launching of the NOC informational sessions. Additional training on the resource directory will be conducted for health department employees regarding services and referral processes. The results of the survey clearly showed the desire of employees to understand other services that are offered in the various divisions within the health department, as well as information needed for appropriate referrals. The team proposes to offer staff trainings on a regular basis for newly hired and existing employees.

It is important that health department employees are trained on the system of care philosophy, which will include interdepartmental meetings and the wraparound approach. Interdepartmental meetings will have a set time, date, location, and will occur monthly. The interdepartmental meetings will operate for the purposes of coordinating and monitoring services. Wraparound meetings will provide service delivery for more intensive needs and will occur monthly or more often if needed. These types of meetings should allow for improved service delivery, enhanced coordination of care, more family involvement, and better outcomes.

Following training the employees will understand the difference between the wraparound process and a single referral to another division. Trainings will occur in

order to have a system based on wraparound values rather than a system that includes wraparound as an option (Lazear & Penn, 2005). The wraparound process is a higher level of service delivery for consumers with intensive needs verses a single referral process for those with less intensive needs. Even thou the wraparound process is for consumers with higher level needs, the principles can be applied to all consumers. The survey conducted by the team, indicated the desire for a care coordinator for this purpose. By training employees about the services within the health department and about the wraparound process, employees will know what an appropriate referral is to each division and to the care coordinator. Once a care coordinator is established, health department employees will be able to make referrals to the care coordinator who will initiate the wraparound process. Specific referral criteria will be established so that employees know when to refer to the care coordinator or when to make a single referral. The criteria for a referral to a care coordinator may include involvement with two or more agencies and the families' desire to engage in the process.

The anticipated outcomes for this project are improved care coordination, increased access to services, and reduced prevalence of social and emotional issues in the youth and young adults. To evaluate the MHLI pilot project, continued tracking of the prevalence of substance abuse, STDs, unintended pregnancies, suicide and mental health related concerns will be done. In addition, the anticipated outcomes will be monitored through consumer satisfaction surveys, interdepartmental statistics, and county data.

Summary

Giving the prevalence of substance abuse, mental health, and reproductive health needs (i.e., STDs and unintended pregnancies) within the youth and young adult population and the need for coordinated service, the MHLI team proposes the

implementation of a system of care within the health department and the community. A system of care can help fill gaps in services and reduce duplication of services by promoting access, availability, and coordination of care. The framework of the system of care ensures that all life domains and needs should be considered together rather than addressing issues in isolation, and so the systems of care are organized around overlapping dimensions (e.g, health services, substance abuse services, mental health services, social services, educational services).

Implementation of a system of care is being proposed by the MHLI team in three phrases (e.g., within Substance Abuse, Mental Health, and Reproductive Health in the Calvert County Health Department, within all divisions of the health department, within the local agencies). The focus of this project is on coordination of services within the health department. A system of care with coordinated services is proposed within the health department by implementing a single point of entry through the utilization of a uniform intake process, an electronic record, the NOC, interdepartmental meetings, and the wraparound approach. An evaluation of the system of care implementation within the health department will help the team to determine implementation strategies for phases II and III.

Conclusion

The Calvert County MHLI team believes that implementing the systems of care philosophy will improve access to services and outcomes for youth and young adults. It is hoped that the implementation of systems of care within phrase I (i.e., Substance Abuse, Reproductive Health, and Mental Health) will be successful leading toward implementation of coordinated care within phrase II (i.e., the entire health department), as well as, within phrase III (i.e., local community agencies). Adherence of the systems of

care philosophy is anticipated if positive outcomes are demonstrated within the health department and community. The MHLI team survey within the health department revealed that employees support coordination of care, feel responsible for linking appropriate services, and feel implementing a position for a care coordinator is needed. Given these survey results staff motivation and buy-in to use the systems of care philosophy should not pose an issue.

Recommendations

- Conduct two meetings per year within the health department to train to new staff on systems of care
- Conduct systems of care trainings within local community agencies (e.g., Department of Social Services, Department of Juvenile Services, Board of Education)
- Use a "Train the Trainers" model to train new staff within the health department and within the local community agencies
- Work toward offering a one-stop shop to provide comprehensive services, such as substance abuse, reproductive health, and mental health services within one office
- Work toward offering mobile comprehensive services
- Implement a care coordinator position within the health department to assist in accessing services and providing follow-up services for consumers
- Conduct interdepartmental meetings on a monthly basis. The meetings will consist of a registered nurse, counselor, other service providers, parents and consumers

- Collect data regarding implementation strategies and outcomes within the health department to determine best practices for the system of care framework within the local community
- Work toward providing transportation assistance to aid in service access
- Offer support groups for parents, grandparents, siblings, caretakers, and consumers
- Provide educational workshops for parents and caretakers (e.g. Tools for Effective Parenting)
- Build stronger relationships with both public and private schools, so that school personnel can act as front line referral sources

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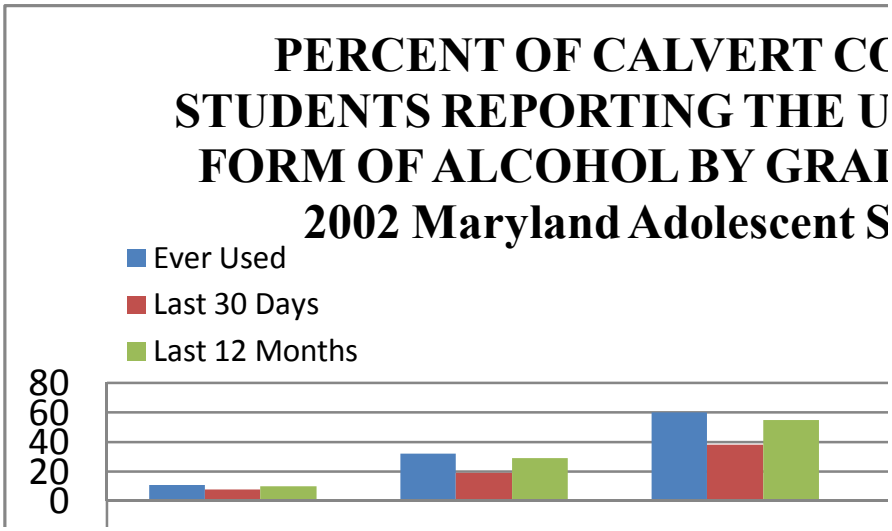
Appendix A

Comparison of Population of Calvert County and State of Maryland for 2006

	Calvert County	
Population 2006 estimate	88,804	5,615,727
Population 2000	74,563	5,296,486
Increase	19.1%	6.0%
Persons under 5	6.1%	State of Maryland
Persons under 18 years old	26.1%	25.1%
Persons 65 years or older	9.1%	11.5%

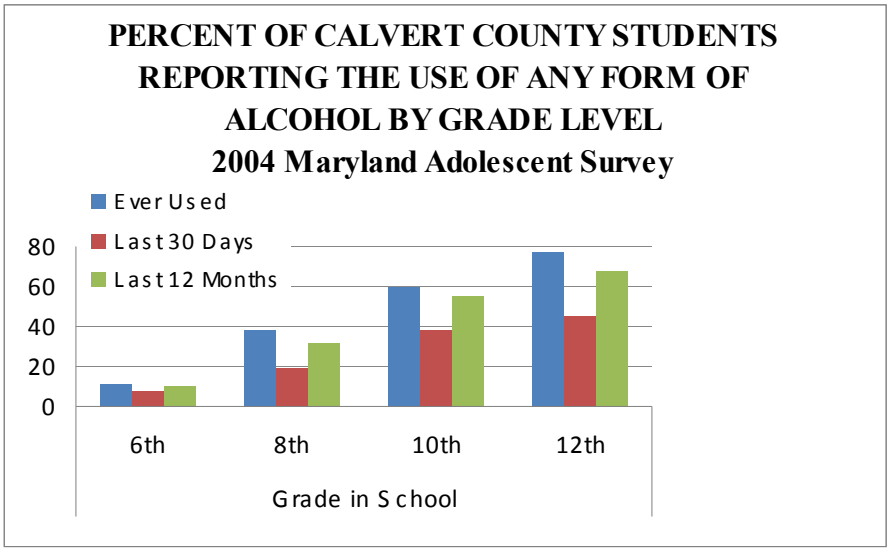
Source: (Calvert County Department of Economic Development, 2006)

Table 1.



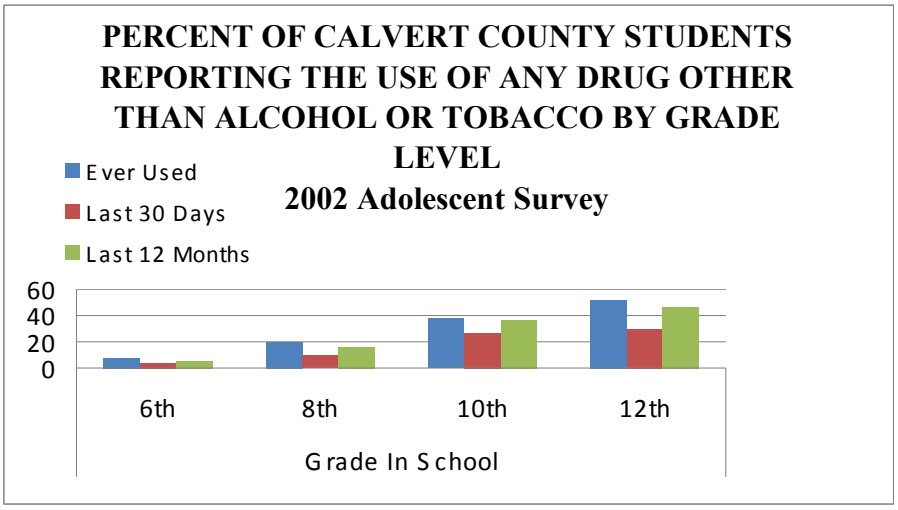
Source: (MAS, 2004)

Graph 1.



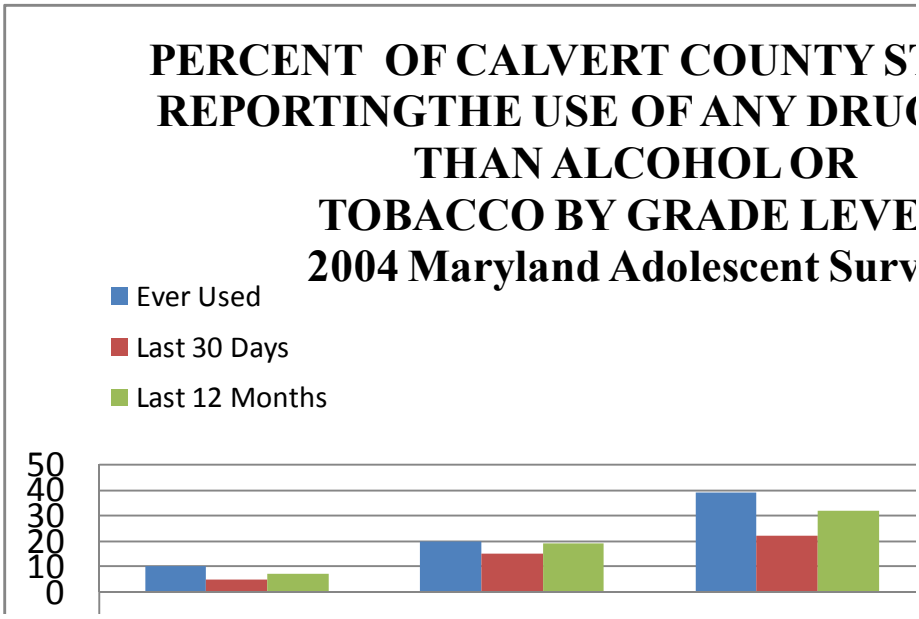
Source: (MAS, 2004)

Graph 2.



Source: (MAS, 2004)

Graph 3.



Source: (MAS, 2004)

Graph 4.

Calvert/Maryland/National Marijuana Use by Grade: Usage in the Last 30 days

	Calvert	Maryland	National
8th Grade	7%	6%	6%
10th Grade	18%	16%	14%
12th Grade	21%	22%	19%

Source: (MAS, 2004; NIDA, 2007)

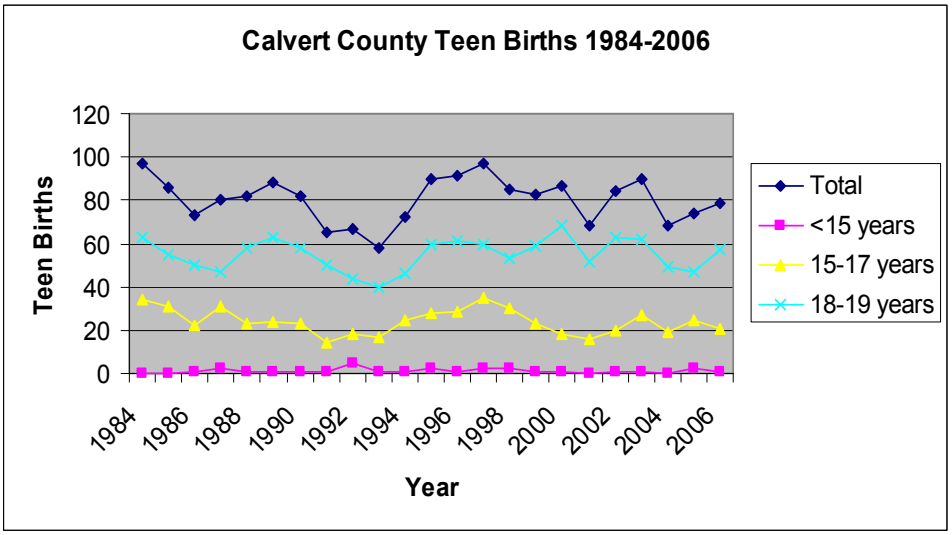
Table 2.

Juvenile Arrests by Type of Violation, and Year, Calvert County

	1999	2000	2001	2002	2003
Total Arrests	888	890	864	819	813
Drug-Related Arrests	124	116	121	122	129
Possession-Related Arrests	114	107	113	116	115
Sales/Manufacturing-Related Arrests	10	9	8	6	14

Source: Adapted by Center for Substance Abuse Research (CESAR) from data from the Uniform Crime Reporting (UCR) Program, Central Records Division, Maryland State Police (MSP).

Table 3.



Graph 5.

Appendix B

Coordinated Services for Youth and Young Adults Survey

Please circle your answers below.

1. How important do you feel coordinating care is for consumers within the health department?

Very important Important Slightly important Not important

2. How knowledgeable are you with services in other health department programs (i.e., mental health, substance abuse, crisis intervention, reproductive health, environmental health, etc)?

A lot Some A little None

3. Would you like training about the services offered in other health department programs?

Yes No

4. How responsible are you for helping to ensure that consumers receive follow-up care for their needs?

A lot Some A little None

5. Would you like training in referring consumers to other health department programs?

Yes No

6. Do you feel the health department needs a case manager to provide referrals and follow-up care for consumers that are linked to other programs?

Yes No

7. Circle Your Department: DDA/AERS/Personal Care, Mental Health, CSAS, CIC, Community Health, Environmental Health, Administration